

Power supply equipment for a motor vehicle, comprising a motor generator, an inverter for driving said motor generator, a battery and a capacitor of an electrical double layer, wherein the capacitor is directly connected to a DC side of the inverter and the battery is connected in parallel with the capacitor via a first switching unit. When an engine is started up, the power stored in the capacitor is used, and the switching units are turned off to separate the battery from the start-up of the engine.